



# TECHNICAL DATA SHEET

## ALCON RAPID PLASTIC STEEL 5 MINUTES

### ORDERING INFORMATION

2212	ALCON RAPID PLASTIC STEEL 5 MINUTES	16 gr. BOX
2205	ALCON RAPID PLASTIC STEEL 5 MINUTES	16 gr. BLISTER
2204	ALCON RAPID PLASTIC STEEL 5 MINUTES SYRINGE	30 gr. BLISTER

Description	A rapid-curing, general-purpose adhesive / encapsulant. It forms a hard, rigid bond or coating in minutes
Features	<ul style="list-style-type: none"> <li>• 7 minute feature time</li> <li>• 100% reactive, no solvents</li> <li>• Good dielectric strength</li> <li>• Good solvent resistance</li> </ul>
Intended Use	<ul style="list-style-type: none"> <li>• Cures fast for quick metal to metal bonding and repairs</li> <li>• Pots and encapsulates electronic components and assemblies</li> <li>• Seals against dust, dirt and contamination</li> <li>• Fast-curing, thin set</li> <li>• Suitable for bonding metals, fabrics, ceramics, glass, wood and concrete (in combinations)</li> </ul>

### PRODUCT DATA

<b>Physical Properties (Uncured)</b>	Colour	Clear	
	Mixed Viscosity	8,000 - 10,000cps	
	Mixed Ratio by Volume	1:1	
	Working time @ 24°C	4-5 minutes	
	Functional cure @ 24°C	1 hour	
	Coverage 0.005mm thickness	33.5 cm <sup>2</sup>	
	Specific volume	833 cm <sup>3</sup> /Kg	
<b>Performance characteristics (cured)</b>	% solids by volume	100	
	<b>7 days cured at 24°C</b>		
	Adhesive tensile shear ASTM D1002	9.7 N/mm <sup>2</sup>	
	Operating temperature, dry	(-40) – (+120°C)	
	Cured density, ASTM D792	1.11 gm/cm <sup>3</sup>	
<b>Chemical Resistance</b>	Cured hardness, ASTM D2240	85D	
	Dielectric strength, ASTM D149	490 volts/mil	
	<b>7 days room temperature cure (30 days immersion)</b>		
	Kerosene	Very good	Methanol
Hydrochloric Acid	Very good	Toluene	Very good
Chlorinated solvent	Fair	Ammonia	Very good
10% Sulphuric acid	Very good	10% Sodium Hydroxide	Very good



Epoxies are very good in water, saturated salt solution, leaded gasoline, mineral spirits, ASTM#3 oil and propylene glycol. Epoxies are generally not recommended for long-term exposure to concentrated acids and organic solvents.

### **APPLICATION INFORMATION**

Surface Preparation	5 Minute Epoxy works best on clean surfaces. Surfaces should be free of heavy deposits of grease, oil, dirt or other contaminants, or cleaned with industrial cleaning equipment such as vapour phase degreasers or hot aqueous baths. Abrading or roughing the surfaces of metals will increase the microscopic bond area significantly and optimise the bond strength.
Mixing& Application	<p>Syringe :Cut both ends of EPOXY TRANSPARENT RAPID BOND syringe dosing equipment by a knife. Push the pistons downward so that the components are removed evenly through the syringe. Stir until a homogeneous mixture. Apply the homogeneous mixture on both surfaces as a thin layer without much waiting. Unite the parts carefully and hold with light pressure for some minutes. The bonding process takes 1-2 hours and the material becomes usable.</p> <p>Tube : Mix two components at same rate.</p> <p>Apply mixed epoxy directly to one surface in an even film or as a bead. Assemble with the mating part within the recommended working time. Obtain firm contact between the parts to minimize any gap and ensure good contact of the epoxy with the mating part. A small amount of epoxy should flow out the edges to show there is adequate gap filling. For very large gaps, apply epoxy to both surfaces and spread to cover the entire area, or make a bead pattern, which will allow flow throughout the joint. Let bonded assemblies stand for the recommended functional cure time before handling. They are capable of withstanding processing forces at this point, but should not be dropped, shock loaded or heavily loaded.</p>
Cure	Cure time for 5-minute epoxy is 45 – 60 minutes for a functional cure. Full bond strength is reached in 16 hours.
Storage Shelf Life	Should be stored in a cool, dry place when not used for a long period of time. A shelf life of 3 years from date of manufacture can be expected when stored at room temperature 22°C in their original containers.
Precaution	For complete safety and handling information please refer to the appropriate Materials Safety Data Sheets prior to using this product.
Warranty	ALCON will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control we can accept no liability for the results obtained.
Disclaimer	All information on this data sheet is based on laboratory testing and is not intended for design purposes. ALCON makes no representations or warranties of any kind concerning this data. For product information visit <a href="http://www.alcon.com.tr">www.alcon.com.tr</a> alternatively for technical assistance please call +90216 661 00 90